



Complete Summary

TITLE

Hypertension: percentage of enrolled members 46 to 85 years of age who had a diagnosis of hypertension and whose blood pressure (BP) was adequately controlled (BP less than or equal to 140/90 mm Hg) during the measurement year.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This intermediate outcome measure is used to assess if blood pressure (BP) was controlled among adults 46 through 85 years of age with diagnosed hypertension.

RATIONALE

Proper management of hypertension has been shown to improve key outcomes such as death and disability. Furthermore, long-term consequences of uncontrolled hypertension are quite serious and can have a huge impact on consumers, plans/providers and purchasers.

PRIMARY CLINICAL COMPONENT

Hypertension

DENOMINATOR DESCRIPTION

Enrolled members 46 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension confirmed by chart review (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

The number of members in the denominator whose blood pressure (BP) is adequately controlled* during the measurement year (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

*For a member's BP to be controlled, both the systolic and diastolic BP must be less than or equal to 140/90 (adequate control).

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 46 to 85 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Approximately 50 million Americans, including 30 percent of the adult population, have high blood pressure.

EVIDENCE FOR INCIDENCE/PREVALENCE

Burt VL, Whelton P, Roccella EJ, Brown C, Cutler JA, Higgins M, Horan MJ, Labarthe D. Prevalence of hypertension in the US adult population. Results from the Third National Health and Nutrition Examination Survey, 1988-1991. Hypertension 1995 Mar; 25(3): 305-13. [PubMed](#)

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Numerous clinical trials have shown that aggressive treatment of high blood pressure reduces mortality from heart disease, stroke and renal failure; results are particularly striking in elderly hypertensives, who are more likely to have heart failure. A pool of past clinical trials demonstrated that a 5 to 6 mm Hg reduction in diastolic blood pressure was associated with a 42 percent reduction in stroke mortality and a 14 percent to 20 percent reduction in mortality from coronary heart disease.

EVIDENCE FOR BURDEN OF ILLNESS

The sixth report of the Joint National Committee on prevention, detection, evaluation, and treatment of high blood pressure. Arch Intern Med 1997 Nov 24; 157(21): 2413-46. [PubMed](#)

UTILIZATION

Unspecified

COSTS

The total direct cost for treating all cases of hypertension is estimated to be \$10 billion annually based on medication being 70 percent of total treatment costs and an estimation that those costs were \$7 billion in 1992. Four of the top 10 drugs prescribed in this country are antihypertensive agents.

The total direct cost for treating hypertension, including office visits, laboratory tests, and medications, is estimated to be \$950 in the first year of treatment, \$575 in the second year and \$420 per year thereafter.

Hospitalization for heart failure is the most expensive single item in the Medicare budget (over \$12 billion annually), and high BP is an antecedent in 90 percent of heart failure cases.

EVIDENCE FOR COSTS

Ahluwalia JS, Doyle JP. Cost of hypertension treatment. J Gen Intern Med 1996 Apr; 11(4): 252-3. [PubMed](#)

Levy D, Larson MG, Vasan RS, Kannel WB, Ho KK. The progression from hypertension to congestive heart failure. JAMA 1996 May 22-29; 275(20): 1557-62. [PubMed](#)

Manolio TA, Cutler JA, Furberg CD, Psaty BM, Whelton PK, Applegate WB. Trends in pharmacologic management of hypertension in the United States. Arch Intern Med 1995 Apr 24; 155(8): 829-37. [56 references] [PubMed](#)

Weinstein MC, Stason WB, Blumenthal D. Hypertension: a policy perspective. Cambridge (MA): Harvard University Press; 1976. 243 p.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Enrolled members 46 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension confirmed by chart review who were continuously enrolled during the measurement year with no more than one gap in continuous enrollment of up to 45 days during the measurement year (commercial, Medicare) or with not more than a one-month gap in coverage (Medicaid)

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Enrolled members 46 through 85 years of age as of December 31 of the measurement year with a diagnosis of hypertension* confirmed by chart review

To confirm the diagnosis of hypertension, the managed care organization (MCO) must find notation of the following in the medical record on or before June 30 of the measurement year:

- hypertension (HTN)
- high blood pressure (HBP)
- elevated blood pressure (•BP)
- borderline HTN
- intermittent HTN
- history of HTN

The notation of hypertension may appear anytime on or before June 30 of the measurement year, including prior to the measurement year. It does not matter if hypertension was treated or is currently being treated. Refer to the original measure documentation for further details.

*Hypertensive. A member is considered hypertensive if there is at least one outpatient encounter with an International Classification of Diseases, Ninth Revision (ICD-9) diagnosis code of 401 during the first six months of the measurement year. Use the codes listed in Table CBP-A in the original measure documentation to define outpatient visits.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Patient Characteristic

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The number of members in the denominator whose blood pressure (BP) is adequately controlled* during the measurement year

*For a member's BP to be controlled, both the systolic and diastolic BP must be less than or equal to 140/90 (adequate control).

To determine if a member's BP is adequately controlled, the managed care organization (MCO) must identify the representative BP, defined as the BP reading from the most recent visit with a BP reading during the measurement year (as long as the visit occurred after the diagnosis of hypertension was made). If no BP is recorded during the measurement year, the member is assumed to be "not controlled." Refer to the original measure documentation for steps to determine the representative BP.

Exclusions

If the MCO can not find the medical record, the member remains in the measure denominator and is considered noncompliant for the numerator.

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Administrative and medical records data

LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

OUTCOME TYPE

Clinical Outcome

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Controlling high blood pressure (CBP).

MEASURE COLLECTION

[HEDIS® 2006: Health Plan Employer Data and Information Set](#)

MEASURE SET NAME

[Effectiveness of Care](#)

DEVELOPER

National Committee for Quality Assurance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2004. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2003. 374 p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Controlling High Blood Pressure (CBP)," is published in "HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on August 29, 2003. This NQMC summary was updated by ECRI on June 16, 2006. The updated information was not verified by the measure developer.

COPYRIGHT STATEMENT

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For detailed specifications regarding the National Committee on Quality Assurance (NCQA) measures, refer to HEDIS Volume 2: Technical Specifications, available from the NCQA Web site at www.ncqa.org.

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